1.9 Pool Pump & Motor

1.9.1 Description of Measure – Pool Pump & Motor

With regard to pool filtration, quicker is not necessarily better. While large, single speed pool pumps filter pools quickly, they use substantially more energy than multi-speed or small single speed pool pumps and motors. The energy used to operate the cleaning and filtering equipment for a typical pool for one swimming season can equal the energy used to power the average home for the same period of time.[91] Programs offer rebates for high efficiency pool filtration pump and motors as part of a new swimming pool installation or a replacement of the standard single-speed filtration pump and motor in an existing swimming pool. Generally, the new pump and motor must be the primary filtration pump and motor assembly of a residential in-ground swimming pool. Above ground pool pumps, booster pumps or spa pumps, do not qualify.[92]

Energy efficient pool pump motors use copper and better magnetic materials to reduce electrical and mechanical losses. As a result, they are longer lasting and more efficient than standard pool pumps. Additionally, high efficiency pumps are much quieter at low speed than standard pumps. High efficiency pumps will also circulate water for a longer period of time, increasing the efficiency of most filter types, automatic chemical dispensers and chlorinators, as well as increasing filter efficiency by decreasing particle impact on most filter types.[93,94]

1.9.2 Market Barriers

High efficiency pool pump and motors may not be compatible with all pool equipment such as roof mounted solar heating systems and some pool sweeps. Efficient equipment may not provide adequate circulation if a system utilizes roof mounted solar water heating units, and pressure and suction side pool sweeps may not receive sufficient water flow. Another potential market barrier is the useful life of pool pump and motors in areas where pump and motor use is not year-round. Replacement opportunities are fewer in areas where residential pool use is seasonal compared to areas where pool pump and motor burnout is more frequent due to continued daily operation.

1.9.3 Pool Pump & Motor - Measure Data

Description – This analysis compared replacing a standard efficiency pool pump and motor utilized for pool filtration and circulation with a high efficiency pool pump and motor.

---

91 Pool Pumps and Motors Factsheet. SMUD. April 2006. (www.smud.org)

92 Pool Pumps and Motors Factsheet. SMUD. April 2006. (www.smud.org)

93 Multi-Speed Pool Pump Factsheet. PG&E. April 2006 (www.pge.com)

94 Pool Pumps and Motors Factsheet. SMUD. April 2006. (www.smud.org)